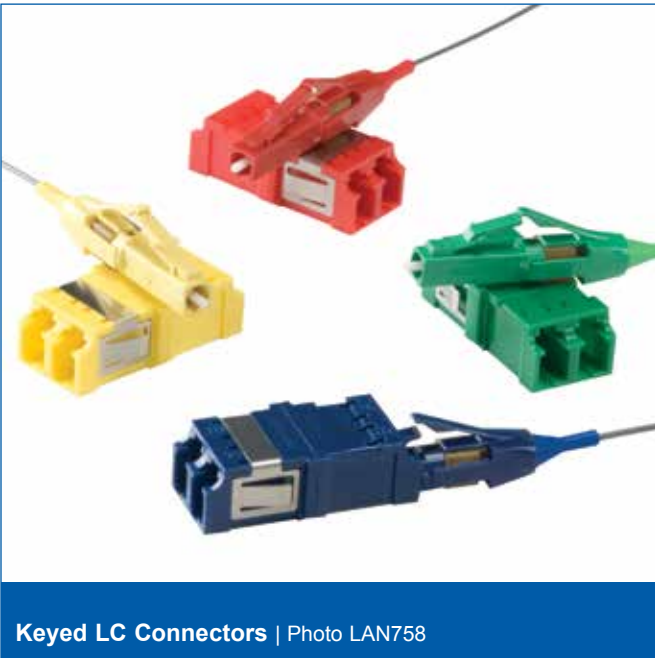# Keyed LC Connector Solution

features and benefits |

Eight color-coded mechanical key positions	Prevents mismatch of networks
Meets TIA/EIA-568-B requirements	Optimum optical performance
Keyed connectors and adapters	Front and rear security in network panel
Full solution availability	Various network applications

Corning Cable Systems Keyed LC Connector Solution offers mechanical network security for organizations desiring to segregate networks due to privacy or security concerns. Utilizing the LC small-form-factor (SFF) format for optical fiber cabling, the keyed LC solution provides physical separation for up to eight networks, applications or organizations. Eight color-coded key combinations prevent inadvertent or unauthorized access to networks and provide fast and easy network identification. Keyed connectors on the front and back of the patch panel area are used to match access rights to the proper network. The keyed features cannot be duplicated with standard LC components, thereby preventing violation of network security. The SFF LC connector allows high-density deployment in less space than SC or ST® Compatible Connectors and supports up to 288 fibers in a 4U rack-mountable housing.

The keyed LC connector solution is available in single-mode (OS2), 62.5 µm multimode (OM1), standard 50 µm (OM2) and laser-optimized 50 µm multimode (OM3/OM4). Corning Cable Systems OM2 and OM3

Keyed LC Connectors | Photo LAN758

Keyed LC Connectors | Photo LAN1289

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Keyed LC Connector Solution

jumpers have enhanced bend performance enabled by Corning® ClearCurve® multimode fiber. Ideal for research labs and secure government facilities, a full solution is available, ranging from factory-installed keyed LC connectors for assemblies and Plug & Play™ Universal Systems modules, to field-installable UniCam® Connectors and anaerobic keyed LC connectors, to adapters loaded into standard LANscape® Solutions panels and modules.

UniCam Connector

- No-epoxy/no-polish
- No need for electrical power for ovens or lights
- Quick installation: less than one minute per connector
- 100 percent factory tested for insertion loss (typical insertion loss is 0.1 dB for multimode and 0.2 dB for single-mode)
- Fast termination, high installation yields and no consumables means lower cost
- Factory-polished end face for consistent optical performance and factory-built jumper quality
- Continuity test set gives immediate go/no-go feedback of successful termination
- Utilizes standard UniCam Pretium® Tool Kit for installation so no additional materials required
- Reliable, proven technology with more than 50 million units sold since 1993

Anaerobic Connector

- Fast-cure anaerobic adhesive; does not require electrical power for lamps or ovens
- Hand polish; does not require polishing machine
- Reduced installation time; single-strike crimp solution ensures fewer than three minutes assembled and polished
- Average 0.2 dB insertion loss with physical contact polish

Cable Assemblies

- Complete line of single-fiber jumpers to high-fiber-count assemblies available with keyed LC for all connector types
- State-of-the-art manufacturing process ensures consistent performance and tightly controlled end-face geometry
- 100 percent factory tested

CCH Adapter Panels

- Universal approach is used; one panel size fits in all standard LANscape Solutions hardware (for example, CCH, PCH, CCS, WCH, ICH, EDC, FZB)
- Adapters are keyed on both sides to provide total network security

CCH Pigtail Modules

- Compatible with PCH and CCH LANscape Solutions rack-mountable housing
- Offers greater protection to optical cables and connectors
- Provided with factory-installed and factory-tested 3 m pigtails
- Available with MIC® Cable or ribbon pigtail types

Plug & Play Universal Systems Modules

- Factory-terminated solutions for improved system performance, component compatibility and consistent quality
- Universal and Classic wired modules enable fast and simple networking moves, adds and changes (MACs) without polarity concerns associated with special polarity-compensating components

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Keyed LC Connector Solution

ordering information |

UniCam® Connectors

```
95 - ☐☐☐ - K   ☐
      |1          |2
```

Note:
1) Also available in Z-PAKs.
Add "-Z" to end of part number.

|1

Select fiber type.
000 = 62.5 µm multimode (OM1)
050 = 50 µm multimode (OM2)
05X = 50 µm laser-optimized
        multimode (OM3/OM4)
200 = Single-mode (OS2)
See Note 1.

|2

Select keyed LC color.
N = Blue   B = Black
R = Red   S = Slate
Y = Yellow   E = Orange
G = Green   V = Violet

Part Number Example

Part Number	Description
95-05X-KN	Keyed LC UniCam Connector, laser-optimized 50 µm, blue

Anaerobic-Cure Keyed LC Field-Installable Connectors

```
95 - ☐☐☐ - 98 - SP - K   ☐
      |1                    |2
```

|1

Select fiber type.
101 = 62.5 µm multimode (OM1)
051 = 50 µm multimode (OM2)
201 = Single-mode (OS2)

|2

Select keyed LC color.
N = Blue   B = Black
R = Red   S = Slate
Y = Yellow   E = Orange
G = Green   V = Violet

Part Number Example

Part Number	Description
95-101-98-SP-KN	Keyed LC Anaerobic-Cure Connector, 62.5 µm multimode (OM1), blue

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Solutions

Keyed LC Connector Solution

ordering information | (continued)

Keyed LC Connector Assemblies

Corning Cable Systems patch cords and high-fiber-count assemblies are ordered using seven easy steps. The steps involve the selection of connector(s), cable and length. The format and steps are listed below.

□ □ □ □   □ □   □   □ □ □   □   □ □ □   □
|1 |2 |3 |4 |5 |6 |7

|1

Select connector codes (two digits per code).
00 = No connectors
     (use when ordering a
     pigtail)
Multimode
39 = SC simplex, ceramic
57 = SC duplex, ceramic
50 = ST® Compatible,
     ceramic
03 = LC simplex
05 = LC duplex
97 = MT-RJ (non-pinned)
24 = Keyed LC simplex
26 = Keyed LC duplex
Single-mode
58 = SC UPC simplex
72 = SC UPC duplex
61 = ST Compatible UPC
02 = LC UPC simplex
04 = LC UPC duplex
98 = MT-RJ (non-pinned)
30 = Keyed LC UPC simplex
33 = Keyed LC UPC duplex
See Note 1.

|2

Select fiber count.
01-96
See Note 2.

|3

Select fiber type.
K = 62.5 µm multimode (OM1)
B = 50 µm multimode (OM2)
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
R = Single-mode (OS2)

|4

Select cable type.
31Z = Single-fiber 2.0 mm
      riser
51Z = Zipcord 2.0 mm riser
81Z = MIC® Riser Distribution
      Cable (2.0 mm legs)
91Z = DFX® 900 Riser
J1Z = Ribbon interconnect
      riser
38Z = Single-fiber 2.0 mm
      plenum
58Z = Zipcord 2.0 mm plenum
88Z = MIC Plenum
      Distribution Cable
      (2.0 mm legs)
98Z = DFX 900 Plenum
J8Z = Ribbon interconnect
      plenum
See Notes 3 and 4.

|5

Select keyed
LC connector color.
N = Blue   B = Black
R = Red   S = Slate
Y = Yellow   E = Orange
G = Green   V = Violet

|6

Select assembly length.
001-999
See Note 5.

|7

Select unit of measure.
M = Meters
F = Feet

Notes:
1) Connector codes are based on the type of adapter used at the patch panel and the electronic interface connector. The connector and adapter must be compatible for a correct connection. Always use the lowest code first when constructing the part number.

2) For fiber counts greater than 96, contact Customer Care.

3) Ribbon interconnect cable option is only available for MT-RJ connector assembly combinations.

4) For additional cable options, contact Customer Care.

5) For lengths greater than 999, contact Customer Care.

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Keyed LC Connector Solution

ordering information | (continued)

Connector Panels

CCH - CP ☐☐ - ☐☐
         |1 |2

|1

Select fiber count.
- 06 = 6 fibers (3 duplex adapters)
- 08 = 8 fibers (4 duplex adapters)
- 12 = 12 fibers (6 duplex adapters)
- 16 = 16 fibers (8 duplex adapters)
- 24 = 24 fibers (12 duplex adapters)

|2

Select keyed LC duplex adapter style/color.

Keyed on both front and back of adapter
- K1 = Blue   KH = Orange
- K5 = Red   KK = Black
- K9 = Yellow   KL = Slate
- KD = Green   KM = Violet

Keyed on front of adapter only, non-keyed on back
- LA = Red   LF = Black
- LB = Green   LG = Slate
- LD = Yellow   LH = Orange
- LE = Blue   LK = Violet

Part Number Example

Part Number	Description
CCH-CP12-K9	CCH Connector Panel with six keyed LC duplex adapters, yellow (keyed front and back)
CCH-CP12-LE	CCH Connector Panel with six keyed LC duplex adapters, blue (keyed front only)

Adapters

ADP - KDLC - CC ☐ RF - CL ☐
            |1 |2

|1

Select color of adapter.
- G = Green   E = Orange
- N = Blue   V = Violet
- R = Red   B = Black
- Y = Yellow   S = Slate

|2

Select keyed LC connector style.
- S = Keyed to keyed
- X = Keyed to non-keyed

Part Number Example

Part Number	Description
ADP-KDLC-CCYRF-CLS	LC Duplex Adapter, yellow, keyed on both front and back of adapter

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Keyed LC Connector Solution

ordering information | (continued)

Pigtailed Modules and Panels

A standard pigtail length is 3 m (9.842 ft). For lengths other than 3 m, please contact Corning Cable Systems Customer Care at 800-743-2671.

CCH - ☐☐ ☐☐ - ☐☐ - P 0 3 ☐ ☐
        |1 |2 |3 |4 |5

|1

Select module or panel.
RM = Module
CP = Panel

|2

Select fiber count.
06 = 6 fibers
08 = 8 fibers
12 = 12 fibers
16 = 16 fibers
24 = 24 fibers

|3

Select keyed LC duplex adapter style/color.
Keyed on both front and back of adapter
K1 = Blue   KH = Orange
K5 = Red   KK = Black
K9 = Yellow KL = Slate
KD = Green   KM = Violet
**Keyed on front of adapter only,
non-keyed on back**
LA = Red   LF = Black
LB = Green   LG = Slate
LD = Yellow LH = Orange
LE = Blue   LK = Violet

|4

Select fiber type.
K = 62.5 μm multimode (OM1)
C = 50 μm multimode (OM2)
S = 50 μm multimode (OM4)
R = Single-mode (OS2)

|5

Select cable type.
H = MIC® Cable subunit
    (standard fiber cable option)
J = Ribbon fiber

Part Number Example

Part Number	Description
CCH-RM12-K1-P03KH	CCH 12-Fiber Pigtail Module with six keyed LC duplex blue adapters and a 3 m long MIC Cable subunit 62.5 μm pigtail, with 12 keyed LC duplex blue connectors

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Keyed LC Connector Solution

ordering information | (continued)

CCH Pigtailed Splice Cassettes (for use in CCH housings only)

CCH - CS □□ - □□ - P 0 0 □ □
|1 |2 |3 |4

|1

Select fiber count.
06 = 6 fibers
08 = 8 fibers
12 = 12 fibers
16 = 16 fibers
24 = 24 fibers

|2

Select keyed LC duplex adapter style/color.
Keyed on both front and back of adapter
K1 = Blue   KH = Orange
K5 = Red   KK = Black
K9 = Yellow   KL = Slate
KD = Green   KM = Violet
**Keyed on front of adapter only,
non-keyed on back**
LA = Red   LF = Black
LB = Green   LG = Slate
LD = Yellow   LH = Orange
LE = Blue   LK = Violet

|3

Select fiber type.
K = 62.5 µm multimode (OM1)
B = 50 µm multimode (OM2)
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
R = Single-mode (OS2)

|4

Select splicing type.
E = Single-fiber splicing
J = Ribbon splicing
     (only for fiber counts of
     12 or 24)

Part Number Example

Part Number	Description
CCH-CS24-K1-P00TE	Closet Connector Housing Pigtail Cassette with 12 LC duplex adapters, blue, keyed front and back with 24 OM3 LC keyed blue connector pigtails routed inside the cassette for single-fiber splicing

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Keyed LC Connector Solution

ordering information | (continued)

Plug & Play™ Systems Keyed LC Modules

CCH - ☐ M ☐☐ - ☐☐ - ☐☐ ☐ - ☐☐

|1 |2 |3 |4 |5 |6

|1

Select module type.
U = Universal
R = Classic
See Note 1.

|2

Select fiber count.
12 = 12 fibers
24 = 24 fibers

|3

Select connector code.
26 = Keyed LC multimode,
    duplex
33 = Keyed LC single-mode,
    duplex

|4

Select MTP® Connector.
70 = Multimode
89 = Single-mode

|5

Select fiber type.
K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
R = Single-mode (OS2)

|6

Select keyed LC color.
BL = Blue
RD = Red
YL = Yellow
GR = Green
OR = Orange
VL = Violet
BK = Black
SL = Slate

Note:
1) Default is Universal. Please note that Classic and Universal components are not compatible with each other.

Part Number Example

Part Number	Description
CCH-UM24-26-70T-YL	24-Fiber, 50 µm Multimode Module with 12 yellow keyed LC duplex adapters

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